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ABSTRACT

The environmental scanning project at the University of Georgia Center for Continuing Education is described. The project attempts to identify signals of change in all sectors of the external environment. Information resources have been selected from the social, technological, economic, and political aspects of the environment at the international, national, regional, and state levels. A process has been designed to ensure that these resources are systematically and regularly reviewed. After describing the history, structure, and circumstances leading to the project, details are provided of how the structure was established and how the system operates to provide strategic direction in organizational and program planning. The benefits, costs, problems, and issues experienced in about 15 months of operating the system are also discussed. Experiences with the University of Georgia system are also compared with those of the University of Minnesota. A scanning taxonomy that can be used to classify abstracts produced in the environmental scanning process is appended, along with a sample abstract, a list of resources being scanned, and a list of issues identified by environmental scanning in 1985-1986. (SW)

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The Environmental Scanning Project at the University of Georgia Center for Continuing Education

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The Environmental Scanning Project at the University of Georgia Center for Continuing Education

In the past two decades the environment of higher education has become increasingly turbulent. The accelerating rate and magnitude of change in every sector of American society have created a "new tableau" of higher education (Keller, 1983). For example, there have been major shifts in the demographic composition of student clienteles, a radical restructuring of the tax code, growing criticism of the quality of the undergraduate curriculum, and increasing use of electronic technologies resulting in major changes in the delivery systems of colleges and universities.

Given this rapidly changing environment, there has been a decrease in the lead time once enjoyed by administrators to analyze and respond to changes in their institution's external environment. Moreover, traditional long range planning models, with their inward focus and reliance on historical data, are weak in identifying external environmental changes and assessing their impact on the organization (Cope, 1981). Ziegler (1970), in his analysis of the planning techniques used by American educational organizations, concluded that they viewed the external environment as remaining static over time, with relatively few variables affecting education. Callan (1986), reinforcing this view, characterized planning in higher education as "extrapolations of institutional experience" (p. 2).

The underlying assumption of such models is that any future change will be a continuation of the rate and direction of present trends among a limited number of social, technological, economic, and political variables, the interrelationship of which will remain fixed over time. They thus reflect an assumption that the future of the institution will reflect the past and present or, in essence, the future will be "surprise-free." We know, however, that this is not true, and the further we go out into the future, the less it will be true.

What is needed, as Jonsen (1986) argues, is a method that enables administrators to integrate understanding about various sectors of the external environment, especially as they might be interrelated; a capacity to translate this understanding into the institution's planning activity; and a sufficient priority given to the activity to ensure its translation into decisions and implementation.

A technique has been developed in the corporate world to systematically gather and evaluate information from the external environment--the environmental scanning process (Thomas, 1980). Brown and Weiner (1985) define environmental scanning as "a kind of radar to scan the world systematically and signal the new, the unexpected, the major and the minor" (p. ix). Aguilar (1967) has defined scanning as the *systematic* collection of external information in order to (1) lessen the randomness of information

flowing into the organization and (2) provide early warnings for managers of changing external conditions. More specifically, Coates (1985) has identified the objectives of an environmental scanning system as:

- detecting scientific, technical, economic, social, and political interactions and other elements important to the organization
- defining the potential threats, opportunities, or potential changes for the organization implied by those events
- promoting a future orientation in management and staff
- alerting management and staff to trends that are converging,diverging, speeding up, slowing down, or interacting (pp. 2-13, 14)

Recent literature in educational planning has encouraged college and university administrators to use this process as part of their strategic planning model (Callan, 1986; Cope, 1981; Keller, 1983; Morrison, Renfro, and Boucher, 1984; and Morrison, 1985, 1986-87). Indeed, a number of colleges and universities have begun to develop methods of formally incorporating environmental scanning information in planning for the future. Sometimes, as is the case at Cantonsville (Maryland) Community College or Georgia Southern College, this takes the form of one or two individuals in the planning or institutional research office doing a survey of the available literature (Morrison, 1986). Often this review is comprehensive and focuses on obtaining important historical data as well as forecasts in the social, technological, economic, and political sectors of the external environment. Periodically, the scan is updated. Many times the scan is restricted to one or two sectors of the environment. Jonsen (1986), for example, cites the scan of the California Postsecondary Education Commission as focusing on demographic and economic data. Other times the scan is confined to selecting key environmental issues, trends, and domains for monitoring. At the University of Minnesota, the Experimental Team on Environmental Assessment (ETEA) identified between 20 and 30 issues to track (Hearn and Heydinger, 1985). Unfortunately, there are few reports in the literature describing these systems, irrespective of the form they are taking. A search of the literature found little in the way of illustrating how an educational organization has actually developed, implemented and used the process to provide information for the strategic direction of the organization.

The Georgia Center for Continuing Education has developed a comprehensive environmental scanning project that attempts to identify signals of change in all sectors of the external environment. That is, we have selected information resources from the social, technological, economic, and political aspects of the environment at the international, national, regional, and state levels, and have designed a process to ensure that these resources are systematically and regularly reviewed. To our knowledge, this is the

most comprehensive scanning system yet operating in a university setting.

The purpose of this paper is to describe the environmental scanning project at the University of Georgia Center for Continuing Education. It begins by describing the history, structure, and circumstances that led to the initiation of the project. What follows is a detailed account of how the structure was established and how the system operates to provide strategic direction in organizational and program planning. The paper concludes with an examination of the benefits, costs, problems and issues experienced in some 15 months of operating the system, and compares the experience of the authors with that of the ETEA members at the University of Minnesota.

The Setting

The University of Georgia Center for Continuing Education opened in January 1957. The Center, on the edge of the University of Georgia campus, resembles a small residential college unto itself, with the major exception that the "students" are adults and stay in residence only a few days to a few weeks. That is to say, the three divisions of the Center--instructional services, telecommunications and media services, and hotel and operating services--provide adult students an environment in which to learn, sleep and eat under one roof. Additionally, the Center offers programs across the state and beyond its borders. During the 1985-86 academic year, approximately 100,000 adults were served by some 245 full-time Center faculty and staff as well as by the part-time instructional efforts of several hundred professors on the University of Georgia faculty.

In August 1983, a new director was appointed, succeeding a person who, at that juncture, was only the second director in the 26 year history of the Center. The new director was an organizational outsider, not having previously been a member of the Center nor of the University of Georgia. In order to learn about the organization's culture and to facilitate personal and organizational renewal, the new director initiated a series of in-service planning seminars for staff, and commissioned external reviews of each division of the Center. The charge to the planning participants was to develop a mission statement for the Center, and objectives for the operating units. The expectation was that discussions focused around strengths/weaknesses, the mission, and the future of the Center would facilitate organizational development and renewal, including team building across the three divisions.

Establishing the System

As part of the professional development activity of the seminars, external consultants were employed to discuss the role of environmental scanning in strategic planning. In their seminars it was stressed that not only could environmental scanning serve as a major source of information for the strategic planning process, but it also had a number of ancillary consequences in line with the objectives of individual and organizational renewal. For example, individuals serving as scanners evaluating what they read, saw, and heard in terms of the implications for the organization not only would become more knowledgeable about what was happening in the external environment, but also would become more future oriented. Furthermore, when these scanners interacted with colleagues about the implications of changes in the external environment, they would not only reinforce a future orientation, but they would also enhance team building. Correspondingly, by focusing on the implications of the external environment for the organization as a whole, individuals would see the "big picture," facilitate communication, reduce protection of "turf," and increase receptivity for organizational change.

For these reasons, and because the seminar participants demonstrated interest in the prospect of being involved in environmental scanning, the management team commissioned an all day workshop on environmental scanning in June 1985. This workshop was viewed as a pivotal experience for Center leadership and staff. Would the initial enthusiasm prevail? Would the benefits of environmental scanning to strategic planning seem worth the extra effort of signing-up as a scanner? Would there be enough volunteers to justify the time and expense of a pilot effort in environmental scanning?

A memorandum from the director to the staff billed the workshop as a voluntary activity, one last opportunity to explore environmental scanning before being asked to commit oneself to becoming an official scanner. Forty-three persons, including the director, associate directors, assistant directors, members of the professional staff, and several secretaries, participated in the workshop. The purpose of the workshop was to learn about environmental scanning and its relationship to strategic planning. Participants were urged to come to the workshop with a list of trends and emerging issues that they felt would affect the future of the Georgia Center. It was intended that the workshop would facilitate the transfer of individual participants' knowledge of the external environment to knowledge that could be acted upon by the organization. Moreover, it was hoped that the workshop would generate enthusiasm for establishing an approach to systematically seeking indications of change in the external environment and using this information to assist the Center plan for the future.

As anticipated, the workshop experience succeeded in building enthusiasm to establish and participate in the system. For some, this was an opportunity for each staff member's individual reading to make a concrete contribution to planning for the Center's future. Also, environmental scanning promised to provide a rich pool of programming ideas tied to trends and emerging issues. For others, environmental scanning indicated a change in management style in the direction of participatory management. For the Center's management team, staff endorsement of environmental scanning meant that a full-blown strategic planning model could be used to supplement more traditional assessments. The familiar discussions of organizational strengths and weaknesses would now be flavored with considerations of external threats and opportunities.

Project Structure

The environmental scanning activity of the Georgia Center is organized as a project of the Center director's office. (See Figure 1). The director serves as project director, and the assistant to the director

Insert Figure 1 about here

serves as the project manager. There are two review committees: the Environmental Scanning Evaluation Committee (ESEC), consisting of volunteer scanners from each of the three divisions; and the Strategic Planning Executive Committee (SPEC). SPEC consists of the director, associate directors, assistant directors, the marketing and communications officer, a telecommunications representative, a facilities representative, and the assistant to the director, who, as project manager, serves as liaison between the two committees.

Scanning Taxonomy

The scanning taxonomy is structured broadly in order to reflect the entire scope of the external environment. The major purpose of the taxonomy is to be able to classify abstracts produced in the environmental scanning process, thereby facilitating retrieval of the abstracts. At the Center, several options were considered: (1) adopt in toto an existing taxonomy such as the one developed by the Trends Analysis Program (TAP) of the American Council of Life Insurance Companies or the taxonomy developed by United Way of America; (2) develop an original taxonomy; or (3) meld the initial list of critical trends and events produced in this workshop with the environmental scanning taxonomies used by TAP and United Way. Option three was selected; in addition, the classifications used to report Center activities were added. The result was a widely ranging taxonomy, because the scope of adult and continuing

education is broad, particularly when viewed within the context of the mission of a land grant university. Also, the Center has to keep abreast in such diverse areas as hotel and food service management; conference/seminar development and management; the "training" phenomenon spawned by government, business and industry as well as professional associations; program development advances in areas in which the Center can utilize UGA faculty expertise; and technology advances in instructional delivery systems. In addition, it was hoped that the system would eventually be computerized; therefore, it was important to have a carefully defined retrieval system.

This taxonomy was important in launching the project, in that the structure it provided enabled the project manager to organize the abstracts along trend lines and specific topics of concern in higher education. However, it was soon obvious that some scanning "finds" were not easily coded according to the taxonomy. Therefore, the project manager began a master list of changes and additions to be included in a revision during the second year of the project. A page from the current taxonomy is displayed in Figure 2.

Insert Figure 2 about here

Assignment of Information Resources

Assigning scanners specific materials for regular review and analysis provided a measure of confidence that many "blips" on the radar screen would be spotted. In collaboration with the Center librarian, a list of continuing information resources to be scanned was initiated, including journals, magazines, newspapers, and newsletters, and the list was matched to the preferences of scanners who were already reading the sources or who wanted to read them. Some 100 information resources were identified and assigned (See Figure 3). In addition, scanners were encouraged to do "wild card" scanning (i.e., to be alert for any information from other than their assigned sources, that would have implications for the Center). Therefore, scanners periodically turned in abstracts of cartoons, radio and TV programs, sessions at professional conferences, and even recent books.

Insert Figure 3 about here

Training Scanners

In August 1985, two training sessions were held for those employees who volunteered to be scanners. Scanners learned that their primary task was to identify objective descriptions of the current external environment and to identify signals of potential change. The concepts used in scanning (i.e., trend, event, and emerging issue) have been defined as follows (Morrison, 1987):

• A **trend** is a series of social, technological, economic or political characteristics that can usually be estimated and/or measured over time. It is a statement of the general direction of change, usually gradual, long term change, reflecting the forces shaping the region, nation, or society in general. Trend information may be used to describe the future, identify emerging issues, or project future events. For example, in 1970, 35% of married women were in the labor force; by 1980 this percentage had risen to 49%.

• An **event** is a discrete, confirmable occurrence that makes the future different from the past. An event would be, "Federal funding for student financial aid is reduced by 50%."

• An **emerging issue** is a potential controversy that arises out of a trend or event that may require some form of response. For example, "Litigation as measured by the number of law suits per year in American society is increasing." An immediate consequence of this trend is substantially higher liability insurance for colleges and universities. An emerging consequence arises from a tendency of state legislatures to protect the public by requiring licensure of an increasing number of occupations, including periodic "updating" of credentials. This consequence implies an enhanced opportunity for the expansion of programming in continuing professional/occupational education.

Scanners were informed that they were scanning to anticipate political, economic, technological and social changes, in order to facilitate the Georgia Center's planning and policy formulation. Therefore, the instructions were to seek signals that indicated departures from expected futures and to monitor essential trends. Specifically, the scanners were requested to ask themselves if the items:

1. represented events, trends, developments, or ideas never before encountered
2. contradicted previous assumptions or beliefs about what seemed to be happening
3. could be linked to other abstracts previously written or seen
4. contained polls or forecasts by experts
5. contained statistical descriptions graphically describing changes

At the Georgia Center, all scanners also serve as abstracters. It was recognized that scanners might be reluctant to spend the time required to write abstracts. However, requiring scanners to write the abstracts themselves had the advantage of having individuals who read the articles also developing the impact assessments and implications that lay behind their identifying the articles in the first place. Furthermore, it is particularly important for senior level people to submit impact assessments of the information they send to the director's office.

Scanners were informed that the lead sentence of an abstract should be a response to these questions: "If I had only a few minutes to describe this article to a colleague, what would I say?" "What is the

most important idea or event that indicates change?" Responses to these questions were followed by a one paragraph explanation. Whenever possible, statistical data were included. The summary was limited to no more than one-half page of single-spaced, typewritten copy, since the scanning evaluation committee must deal with some 60 to 120 information items per quarter. This review is made easier when abstracts are contained on a single page. The implications section is the last section of the abstract. Here scanners were asked to respond to the question, "How will the information in this article affect the Georgia Center's programs or management?" (See Figure 4 for an example of an abstract submitted by a Center scanner.)

Insert Figure 4 about here

The System in Operation

The previous section describes the essential components of any environmental scanning project and the way in which they were developed by the Georgia Center for its purposes. At this point, it is possible to visualize parts of the whole--as a model for any organization. There is a project director to oversee the entire process. There are scanners who are scanning, reading, and abstracting articles from assigned publications. There is a project manager, receiving, reading, and coding abstracts. There are two committees, both responsible for analyzing the data (abstracts) in terms of implications for strategic planning.

This section describes the procedures by which these components are coordinated once each quarter to obtain organizational consensus as to the most pressing threats and opportunities implied in the abstracts developed in the Georgia Center. We will illustrate this process, paying particular attention to describing some of the trends, issues, and events that have surfaced thus far and illustrating the way they were used in the Georgia Center's strategic planning process.

The Schedule

In the last three weeks of the system's quarterly operating cycle, a tightly coordinated series of events, activities, and committee meetings focus on information collected during the quarter. In the first week, all abstracts submitted since the last quarterly review cycle are reviewed by the project manager, who then synthesizes them into a coherent reference called a "Strategic Planning Worksheet." (See Figure 5.) In essence, this preliminary analysis categorizes the abstracts under general statements

Insert Figure 5 about here

related to trends, issues, or events. These statements, referred to as "strategic thinking stimulators," are paired with thumbnail summaries of all pertinent abstracts.[1]

The Evaluation Committee Meeting

In the second week, the project manager chairs a meeting of the Environmental Scanning Evaluation Committee (ESEC). As mentioned previously, all Georgia Center scanners who do not serve on the Strategic Planning Executive Committee (SPEC) form the pool from which ESEC members are solicited each quarter. The purpose of making membership voluntary is to encourage participation of all staff members in the Georgia Center's strategic planning process. The number of staff members participating in this committee has ranged from 14 to 25 over the past six quarters.

The ESEC meeting begins with committee members independently reviewing a copy of the "Strategic Planning Worksheet." They are instructed to identify on a tally sheet seven or eight strategic thinking stimulators (approximately one-third of the number produced each quarter) that have the most salient implications for the Georgia Center. (Thirty minutes is allowed for this step.) Then, in round robin fashion, members publicly cast one vote for a stimulator they consider important to the Center. The tally is recorded on a flip chart during each round. This process continues until each member of the group has exhausted his or her allocated quota of votes. Through a modified nominal group technique, the top four issues are then discussed by the committee. The primary purpose of this activity is to clarify, focus, or expand the issues as they relate to the Georgia Center and to make recommendations for the strategic planning process.

The Strategic Planning Executive Committee Meeting

After ESEC's meeting, the project manager initiates SPEC's formal review of the "Strategic Planning Worksheets," and the quarter's abstracts. The project manager delivers to each SPEC member the "Strategic Planning Worksheets," a voting form, and all abstracts collected that quarter. As the anonymous votes come in from SPEC members, the project manager tallies the results. When all votes are tallied, the project manager generates a comparison of the top six issues surfaced by ESEC and by SPEC (see Figure 6), and delivers the evaluation committee's written report to SPEC members.

Insert Figure 6 about here

The Strategic Planning Executive Committee meets in a half-day session. The first order of business is to formulate an update on the action agenda set by SPEC in previous meetings. Planning adjustments and a new agenda may develop in these discussions. The second order of business is to examine and discuss the final comparison of ESEC and SPEC votes as to those trends, issues, and events that have the most implications for the Georgia Center's future. A crucial concern is: Are the same issues surfacing from "bottom-up" as from "top-down"? If there are conspicuous differences, what do they indicate to Center management?

The third order of business is to discuss and act upon the three top concerns of ESEC. These discussions are always broadened by the perspectives and orientations of SPEC members. ESEC recommendations may be adopted, modified, or rejected (within the context of the Center's overall strategic plan), or SPEC may generate an alternate solution. Finally, SPEC discusses and acts upon those concerns uppermost in SPEC's assessment and not identified by the ESEC.

Post-Analysis Follow-Up

The three-week flurry of scanning activity, which once a quarter concentrates the efforts of thirty to forty scanners in the arena of analysis, concludes with the SPEC meeting. However, at this stage, much remains to be done in follow-up, the premise being that environmental scanning information should be widely disseminated throughout the organization and that everyone should be clear about results and the action agenda that may have been set. A memorandum from the Director to SPEC summarizes SPEC's quarterly deliberations and the action assignments that were made. A memorandum from the project manager to the evaluation committee is used to transmit a copy of the director's memorandum to SPEC, the evaluation committee's written report to SPEC, and the comparison of top concerns voted by SPEC and the evaluation committee.

As noted earlier, all abstracts, articles, and written reports are deposited in the Center library for use of staff; check-out of materials is permitted. Moreover, staff members are encouraged to use the environmental scanning materials in considering their program implications. In addition, within each quarterly cycle, the project manager compiles and distributes to all Georgia Center employees an environmental scanning newsletter, *Lookouts* (See Figure 7). Most of the material for *Lookouts*

Insert Figure 7 about here

is gleaned from abstracts and summarizes national, regional, state and local issues. Included in each edition are the top strategic concerns identified during the quarter by SPEC and the Evaluation Committee as well as programming ideas identified by scanners.[2] Each issue concludes with an acknowledgment of all scanners whose scanning "finds" were used.

The System Responds

From September 1985 until April 1987, the environmental scanning project at the Georgia Center identified a number of issues viewed as critical for some dimension of the Center's operation. For example, both SPEC and ESEC evaluated such issues as the increasing demands for child care on college campuses, accommodation of management to values and aspirations of "baby boomers," adult illiteracy, increasing buying power of senior citizens, and the rapid expansion of VCRs in American homes. Examples of issues identified during the first 18 months are summarized in Figure 8.

Insert Figure 8 about here

Two examples illustrate how information identified in the environmental scanning process has been used in developing strategic direction for the Center. The first example deals with the organization's perceived need for freedom to experiment, innovate and fail, while seeking to renew the organization's creativity. The second example focuses on human resource development, both as a programming option for the Georgia Center and as a needed in-house activity for the professional development of staff.

In the first example dealing with innovation and creativity, scanners submitted a number of articles that were grouped by the project manager under a strategic thinking stimulator called "organizational and personal renewal as on-going components of strategic planning." One article addressed the issue of an organization's falling victim to its own historical success and not planning appropriately for the future (Hirsh, 1986). In another abstract, Peter Drucker was quoted as stating, "Innovation is the specific function of entrepreneurship, whether in an existing business or a public service institution. . . " (1986, p. 67). He went on to describe innovation as a disorderly and unpredictable process that must be facilitated by managers who frequently prefer order and predictability. An article by Quinn (1985) stressed that successful entrepreneurs, inventors, and creators tend to be "possessed" and demand flexibility and

quickness, unencumbered by committee approvals and bureaucratic delays within the organization. Other abstracts discussed "idea entrepreneurs." Kanter (1986) argued that middle managers should be "reshaped" as planners, strategists and project leaders. Deets and Morano (1986) described how the Xerox Corporation encouraged high risk and innovation. Katz (1986) concluded that current management thinking maintained that administrative and managerial skills in technical, conceptual and human relations areas were not in-born, but could be developed with help and the opportunity to learn by doing. The implication of these abstracts was that the Center needed to provide freedom to experiment, in order to stimulate creativity and entrepreneurship.

The Evaluation Committee's discussion and review of the literature represented by the abstracts led them to focus on the concept of a "skunk works," as a needed management concept at the Georgia Center. This idea, pioneered by the Lockheed Corporation, had permitted groups of workers to experiment on anything to which their imaginations led them. Unencumbered by demands for accountability, the process assumed that innovation would occur in an environment free of restrictions on experimentation. The evaluation committee recommended in its report to SPEC that the Center adopt a "skunk works" approach.

There was much discussion of the recommendation in the SPEC meeting. While the majority of committee members saw the importance of innovation, creativity and the need to experiment in the organization, they wanted more structure than was present in a "skunk works." The result of their discussions was a recommendation to the director that the Center adopt a plan to provide internal grants as incentives for experimentation. These grants would be awarded on a competitive basis and would be viewed as seed money; failure would not be "the kiss of death."

In the second example, the method of dealing with an issue identified in the scanning process differed dramatically from the first. Both committees discussed human resource development (HRD) in an effort to define it and use it at the Center for program and organizational renewal. The evaluation committee focused on a number of abstracts grouped under the strategic planning stimulator question, "Is HRD, rather than traditional continuing education, the wave of the future?" It concluded that this question had important implications for the future of the Center. Scanners cited the "National Report on Human Resources" (American Society for Training and Development, 1986), which indicated that Congress apparently favored an integrated approach to HRD. For example, the House of Representatives was considering the National Training Incentive Act, while the Senate was considering the Educational Training and Partnership Act. Training targets in both proposed Acts included entry level employees, middle aged women, welfare recipients, the disadvantaged and the dislocated. Congressional consultation with the

American Society for Training and Development had led to a recommendation for building lifelong learning systems. The goal was to create workplace productivity and more dollar incentives for employers. Targeted audiences and issues were viewed by some scanners as critical for a university-based continuing education center. Consequently, the Evaluation Committee, over a period of several quarters, continued to define HRD issues facing the Georgia Center. SPEC members, however, considered HRD to be an umbrella term that includes continuing education plus a number of functions once relegated to a "personnel officer," such as the development of career tracks, pre-retirement planning, benefits, and professional and personal counseling. Consequently, they did not choose to pursue the matter further.

The articles identified in the environmental scanning process, their evaluation by ESEC, and the discussions of the issue at the SPEC quarterly meeting, however, did influence the director to the extent that he became convinced of the importance of HRD as a programming thrust. He felt that not only should HRD-focused training efforts be designed by the Center programming staff, but that HRD contained important elements for the personal and professional health of the Center's employees. Subsequently, after further discussions with senior staffers, he initiated a reallocation of personnel resources to begin a new program effort in the human resources development area. Thus, the scanning process generated a topic of considerable interest to one element of the organization, but an interest that could not be sustained initially for senior management other than in the director who, in this case, chose to act because of the persuasive arguments from colleagues on the Evaluation Committee.

Costs of Operating the System

The costs of operating an environmental scanning program may be discussed in terms of personnel time, scanning resources, printing and copying expenses, and computer support. While these costs may vary widely, depending upon the design of an environmental scanning project, extrapolations from the Georgia Center experience should prove helpful.

The greatest expense incurred is in staff time. The project manager spends half-time on this task. As mentioned above, there is an intense three-week period of preparation for the quarterly meetings of the two analysis committees, during which the project manager works full-time. In addition, editing and producing the newsletter, Lookouts, requires full-time commitment for a week, each reporting period. Periodic responsibilities of the manager include (1) receiving, reading, and coding abstracts; (2) conducting monthly one and one-half hour meetings with one or two representatives of the Evaluation Committee during which recently submitted abstracts are examined for emerging strategic and

programming concerns; (3) scanning and abstracting articles; and (4) answering inquiries regarding environmental scanning.

It is less easy to judge other aspects of personnel time that go to the environmental scanning project. Most scanners assume responsibility for two publications; a few hardy souls also scan one of several daily newspapers on the resource list. The time they spend in abstracting is difficult to assess. For instance, a simple news item with a clear-cut implication for the Georgia Center could be abstracted in thirty minutes. At the other extreme, a lengthy article yielding several interlocking implications for the Center might require an hour or more to prepare. Scanners who elect to participate in quarterly abstract-assessment meetings must block their calendars for a half-day. SPEC members spend an additional one to two hours assessing and voting on abstracts prior to their quarterly meeting. Finally, although scanning and abstracting are regarded as important activities for the Center and for individual professional development, they never take precedence over operational job assignments. Consequently, many scanners elect to scan and abstract after hours.

Costs related to environmental scanning of continuing resources (magazines, journals, newsletters, and newspapers) have been minimal, in that the Georgia Center is one of several campus locations for satellite facilities of the University of Georgia's main library. The annual library budget has proved adequate to add the few resources not already subscribed to. Of course, costs for subscriptions could be substantial for any organization without these facilities.

Operating an environmental scanning system requires access to copying facilities. Approximately 100 abstracts with a copy of the accompanying article are received each quarter. The abstracts are copied for the three SPEC notebooks reviewed by individual SPEC members each quarter. In addition, 75 copies of the "Strategic Planning Worksheets" are needed along with 200 copies of Lookouts. Extra copies are often produced for use in environmental scanning presentations and as enclosures to letters responding to inquires about environmental scanning. These costs have proven minimal in this project, because the Center has printing and copying facilities available in-house. They would be somewhat expensive, however, if the organization had to secure these services externally.

Evaluation

In January 1987, the 43 initial participants in the environmental scanning project were sent questionnaires asking them to evaluate (1) their participation in various aspects of the project, (2) the ability of their colleagues to analyze trends, issues, and events, (3) the benefits of the project, and (4) their

recommendations for improving the project.

Thirty-two participants responded (74%). Nine respondents reported submitting from 4-10 abstracts, and six respondents reported submitting over 11 abstracts during this period. Nine did not submit any abstracts during the first year of the project. Eight respondents submitted between one to three abstracts. Many respondents wrote that the lack of time was the primary deterrent in their participation.

With respect to participation in quarterly ESEC meetings, nine respondents attended all of the four meetings held in the first year of the project, eight attended at least one of the meetings, and six did not participate at all. (Again, these respondents blamed lack of time or scheduling conflict for interfering with participation.) Of those who participated in the meetings of either SPEC or ESEC, most thought that quarterly meetings were appropriate, and almost every respondent thought that the procedures used in these meetings were very helpful.

When asked to evaluate the skill of the group in which they participated (ESEC or SPEC) with respect to analyzing trends, issues, and events, the vast majority of respondents (74%) judged this skill to be only average. Lack of experience was given as the primary reason for this evaluation; there was a perceived need for more training in selected futures research methods.

Respondents were asked to evaluate the "feed-back" loop used in the project (i.e., ESEC forwards its concerns and recommendations to SPEC, and SPEC sends a summary of its discussion back to ESEC). All SPEC members and 62% of ESEC respondents saw the feedback loop as a beneficial process. Those who did not check "beneficial" were asked to comment. One respondent thought that there was "mostly lip service to analyses and conclusions." Several others recommended a joint meeting of the two committees after both had analyzed that quarter's abstracts and strategic planning worksheets.

Respondents were then asked to rank order five specific "benefits" of the project and to identify others not specified on the questionnaire. The rank order of benefits was as follows: (1) provides assistance in linking the Center's future to external threats and opportunities; (2) provides useful programming suggestions; (3) fosters cross-divisional communication and understanding; (4) enhances staff development; and (5) results in the newsletter, *Lookouts*. Contributed "benefits" centered on such things as assisting management to keep informed of new developments, identifying marketing opportunities, providing for wide participation in planning the Center's future, enhancing strategic planning, enhancing the Center's reputation as a leader in continuing education, and facilitating personal development.

Respondents were then requested to make an overall evaluation of the project. Out of 30

participants who responded to this question, 16 (53%) noted that the project was "well worth the time and effort," 13 (43%) noted that it was "probably worth the time and effort," and one person said that it was "not worth the time and effort." Seventy percent of the SPEC members voted that the project was "well worth the time and effort," thirty percent voted that it was "probably worth the time and effort."

Finally, respondents were requested to make specific suggestions for improving the system. Several respondents commented that the information sources currently used should be reevaluated and new sources identified, particularly non-print sources such as conferences, radio, and TV. Others reported a problem in finding time to participate in scanning, writing abstracts, and evaluating abstracts. One person suggested that "ghost-writers" be employed to write abstracts of articles identified by scanners; another suggested that "lead scanners" be identified (and rewarded) to write the majority of abstracts with assistance from everyone identifying articles to be abstracted. One respondent said, "Involvement in the scanning process should be an integral part of each employee's job, not an add-on volunteer effort."

Several comments indicated tension between members of SPEC, the formal leaders of the Center, and other staff members. For example, a SPEC member, said, "I believe that SPEC has demonstrated an unwillingness to consider suggestions or criticisms from 'THEM' as attempts to be constructive. Unless SPEC discovers some way by which it can develop objective views of information coming from the outside . . . and can treat that information with respect, I fear the effort is doomed." Another respondent recommended inviting those who volunteered to participate in evaluation committee meetings to meet with SPEC, a recommendation that appeared designed to facilitate communication within the organization.

Discussion

As Hearn and Heydinger (1985) note, several authorities have commented on the difficulties of implementing information systems and forecasting models in colleges and universities (Bloomfield and Updegrove, 1982; Kirshling, 1976; Masland, 1983; and Schmedline, 1977). Moreover, in their review of the literature, Hearn and Heydinger identified a number of constraints to environmental scanning in a university environment. For example, they note that colleges and universities have rather vague and diffuse goals, that their environment is limitless, that they are loosely coupled, are resistant to change, and require participatory governance. Moreover, the organizational culture of institutions of higher education is restrained and rational, and, thus, counter to a planning method that requires trusting hunches, tracing hints in nonacademic and fugitive literature, and piecing together a narrative out of disparate clues from a

variety of information resources. Finally, not only is environmental scanning time-consuming and costly, but, in the academic culture, it may also be viewed as an attempt to adapt to externally-imposed conditions, an attempt that some could interpret as representing a consumer orientation. This might cause environmental scanning to receive little or no support from the faculty.

Given these constraints, it would seem that environmental scanning is an approach that could be implemented in a university setting only with great difficulty. However, members of the University of Minnesota Experimental Team on Environmental Assessment (ETEA) thought that their effort at environmental scanning was worth continuing. Furthermore, they believed that their activities served to prod administrators to think in environmentally-sensitive ways, as well as to produce important information regarding external developments.

The Georgia Center for Continuing Education is, as noted above, similar to a college in many respects. It has, however, important differences. For example, the director and associate directors exercise more line authority in managing the programs and direction of the Center than they would if their titles were president/dean/department head at an independent college. That is to say, the Center is not as loosely coupled as a college or university. Although UGA faculty members teach at the Center on a part-time basis, historically they have taken little interest as a faculty body in the governance or management of the Center. Therefore, the experiences of the authors thus far in establishing and in implementing an environmental scanning system may have to be adjusted to accommodate the culture of an independent academic college or university.

It may be instructive to compare an evaluation of the Georgia Center's environmental scanning project with the evaluation of the Minnesota project as reported by Hearn and Heydinger. For example, the evaluation of the Minnesota project centered around such crucial questions as: Who should do the scanning? How should the effort be organized? What should be produced?

Who Should Do the Scanning?

As noted in the description of the Georgia Center project, each member of the Center was invited to participate as a scanner. The alternative would have been to invite selected individuals from each functional area. We chose to make participation voluntary, because this was an experiment and was instituted not only for the purpose of informing the strategic planning process, but also as a means of facilitating personal and professional staff development. Consequently, over 40 individuals participated at various times, and all functional areas were represented.

The Minnesota team was also voluntary and was composed of six individuals. Members of this team

performed the scanning, abstracting, and evaluating. When asked to comment on who should do the assessing, several members expressed concern that too much diversity, or having too many people involved in assessment, could be disfunctional (i.e., the voluntary nature of the activity might be too fragile to accommodate inherent tensions or diversity). The authors' experience has been that it was the very fact of such a diverse and large number of scanners that has enabled us to expand the number and diversity of information resources regularly reviewed for "signals of change." The procedures and processes used in the ESEC meetings have permitted 14-25 volunteers to function efficiently in the analysis of scanning input.

How Should the Effort Be Organized?

The Minnesota scanning project and the Georgia Center project were organized differently from each other. At Minnesota, the effort was organized to link the identification of core issues for assessment and tracking. That is, after brainstorming a list of critical issues, the Minnesota team concentrated on scanning information resources pertinent to the 30 some issues identified in the initial stages of the project.

The scanning effort at the Georgia Center also began with a brainstorming activity to identify critical trends, events, and emerging issues. However, the purpose of this activity was to use this information in developing the scanning taxonomy, and in training scanners. After the taxonomy was developed and scanners were assigned specific information resources, the focus of the process was to function as a 360° radar screen to pick up any signals of change from the hundred or so resources. Moreover, the scanning activity was spread throughout the organization, an organizational pattern that was rejected by the Minnesota team (Hearn and Heydinger, p. 437).

The Minnesota project also differed in its location within the organizational structure. That is, the scanning effort originally began when selected administrators were asked to review literature vis-a-vis important trends in the social, technological, economic, and political spheres. Shortly after this task was accomplished, the team was formed. Although the scanning project had the informal blessing of a senior administrator, the project was designed, developed and implemented as an informal experiment. In contrast, the Georgia Center project is centrally related to the planning process; the director serves as project director, and his assistant is assigned half time to manage the project. The Strategic Planning Executive Committee carefully considered the information produced by that process in quarterly assessment and planning meetings.

Placing the environmental scanning project as an official, formal part of the organization, and encouraging volunteers to participate, means that the administration must be willing to embrace debate over the implications of the information that has surfaced in the process. Of course, as Hearn and Heydinger note, a number of authorities maintain that a healthy goal for administrators is a willingness to embrace error and learn from it, rather than avoid it or cover it up (Cohen and March, 1974; Baldridge and Okimo, 1982). At the initiation of the project at the Georgia Center, it was foreseen that encouraging staff members to identify and abstract information items that had implications for the welfare of the Center would produce feelings of "ownership" and responsibility for the direction of the Center, in those staff members. It was unforeseen, however, that strong differences of opinion could also be a product of this process, particularly since the senior management of the Center believed in participatory management and initiated a process that encouraged a "bottom-to-top" information flow.

For example, with respect to the examination of the strategic thinking stimulator called "organizational and personal renewal as on-going components of strategic planning," while members of SPEC and the evaluation committee viewed the need for renewal and innovation as essential for the Center, they disagreed on how to obtain them. Even though a course of action was decided upon (i.e., the incentive grants), the decision process highlighted potentially troublesome differences in organizational culture.

Most of the SPEC members expressed the viewpoint that innovation, experimentation and risk-taking were on-going facts of life at the Georgia Center, and, therefore, there was no need for a special "renewal" program. On the other hand, many members of the evaluation committee viewed senior management as conservative and non-risk-taking. While SPEC members talked of experimentation and innovation inherent in the operation of the Center, evaluation committee members maintained that there was no reliable way in the Center to promote and implement new ideas.

Closely associated with this issue was a continuing discussion in SPEC meetings related to the values of baby boomers and the implications of this issue for the management of the Center's workforce. A scanning "find" in The Futurist (Deutsch, 1985) focused discussion on the impact of "baby boomers" on organizational cultures and how organizations dealt with their attitudes. Deutsch divided the workforce into three broad categories--pre-World War II (born in 1926 or before), "TV" or "baby boomers" (born between 1946 and 1964), and "computer babies" (born from about 1966 through 1975). Each of these groups was characterized within specific categories, such as preferred work environment, goals, work medium, time values, information, acculturation, media and consumption. Those preceding the "baby boomers" were viewed as more structured and directed toward "getting the job done for the good of the

organization." From the "boomers" forward, attitudes were focused more on individual desires and increased organizational flexibility. At the Center, there were no true pre-World War II employees who were members of SPEC, although several individuals were relatively close. The evaluation committee had a number of TV babies, or "boomers," as well as some "computer babies." Consequently, generational differences surfaced. That is, the evaluation committee projected a sense that senior management was conservative and laissez-faire in approach; many SPEC members projected a sense that some staff members had not internalized the work ethic. Thus, a scanning issue on ways to develop innovative programs underscored and complemented an issue important to organizational behavior.

What Should Be Produced?

The Minnesota team emphasized that the products of the environmental scanning process should outline how developing issues will affect the institution, its constituencies, structures, and processes, and should raise the consciousness of the leadership regarding an issue. Moreover, the products given to the administration should be in the form of crisp executive summaries directed to facts and alternatives, not to active recommendations. In contrast, SPEC members were encouraged to examine abstracts as well as the evaluation reports produced by ESEC, reports that included recommendations for action. This process has worked well for the Center; but, again, there is a difference in working to determine strategic direction of a Center as opposed to a research university.

Both the Minnesota team and the Center project participants felt that the experiments in environmental scanning were successful, and produced meaningful products. In fact, at the Georgia Center, the information produced in the scanning process has been valued by individuals in organizations outside of the Center. For example, there have been several offers to purchase the existing scanning files, and, indeed, encouragement to share the incoming information and analyses in contractual arrangements on an on-going basis.

Even with this external endorsement, danger exists that some believe all management decisions are being based upon the scanning process. In reality, information from the environmental scanning project forms only one part of numerous data sources fed into the decision-making process. As Jonsen (1986) argues, an understanding of the environment and its opportunities or threats should not dictate an organization's course of action. Scanning's outstanding virtues are that it permits a systematic review or "tickler file" for the organization of priorities and issues that are dealt with over an extended period of time. The system provides no "quick fix" or gimmick for management. It requires an intensive amount of work by a few individuals and some work by many. It is frustrating and demands the commitment of an invaluable

resource--time.

Nevertheless, a number of ancillary benefits of the process have been noted. Any group of professionals in today's world faces information overload. While the environmental scanning project certainly does not expose participants to all the literature in their domain, it does offer a systematic, formal approach to important literature related to the individual's particular specialization. Although this exposure is uneven in nature, it is a substantial and serious effort to deal with the issues produced by the process, both individually and as members of a decision-making body. The analytical skills required by each scanner to summarize articles, assess them within the context of the Georgia Center, and promulgate implications for the Center, both from programming and organizational perspectives, sharpen professional reading skills and analytical abilities, and expand personal knowledge. As Hearn and Heydinger note, ". . . by turning around ideas and challenging various perspectives on the world, the . . . dialogues reinforce a long lost and much valued ingredient into the . . . university" (p. 437). The dialogue contributes to employee satisfaction and growth, and thus to organizational effectiveness.

The environmental scanning project has had an impact upon the Georgia Center from several perspectives. It has provided a procedure by which professionals at various administrative levels within the organization and with differing program responsibilities can make suggestions to senior administrators and even debate the issues with them. It has already forced management to deal systematically and cyclically with issues raised by subordinates as well as peers. The issues that have been raised have spawned rich, thought-provoking discussions that likely would not have taken place without the process. Moreover, it has been stimulating to develop a new approach to planning, even though the methodology is still developing.

The Georgia Center is fortunate to have the resources to support a comprehensive environmental scanning program. This does not mean that scaled-down versions could not be effective in their own right. For instance, a small staff of continuing educators might agree to "specialize" in the broad taxonomy categories--political, economic, technological, and social. Resources to scan and abstract might include the *Chronicle of Higher Education*, adult and continuing education journals and newsletters, and key publications that summarize trends and issues, for example, *John Naisbitts trend letter* and *Future Survey*. Bimonthly or quarterly meetings to assess scanning input for organizational implications would achieve the goal of adding a systematic view of the external environment to the planning process. As Keller (1983) says, "We must act, doing the best we can with what we have. Herodotus and Thucydides wrote the first histories without a tidy method. Environmental scanning too should proceed regardless, adjusting regularly to new conditions" (p. 158).

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Footnotes

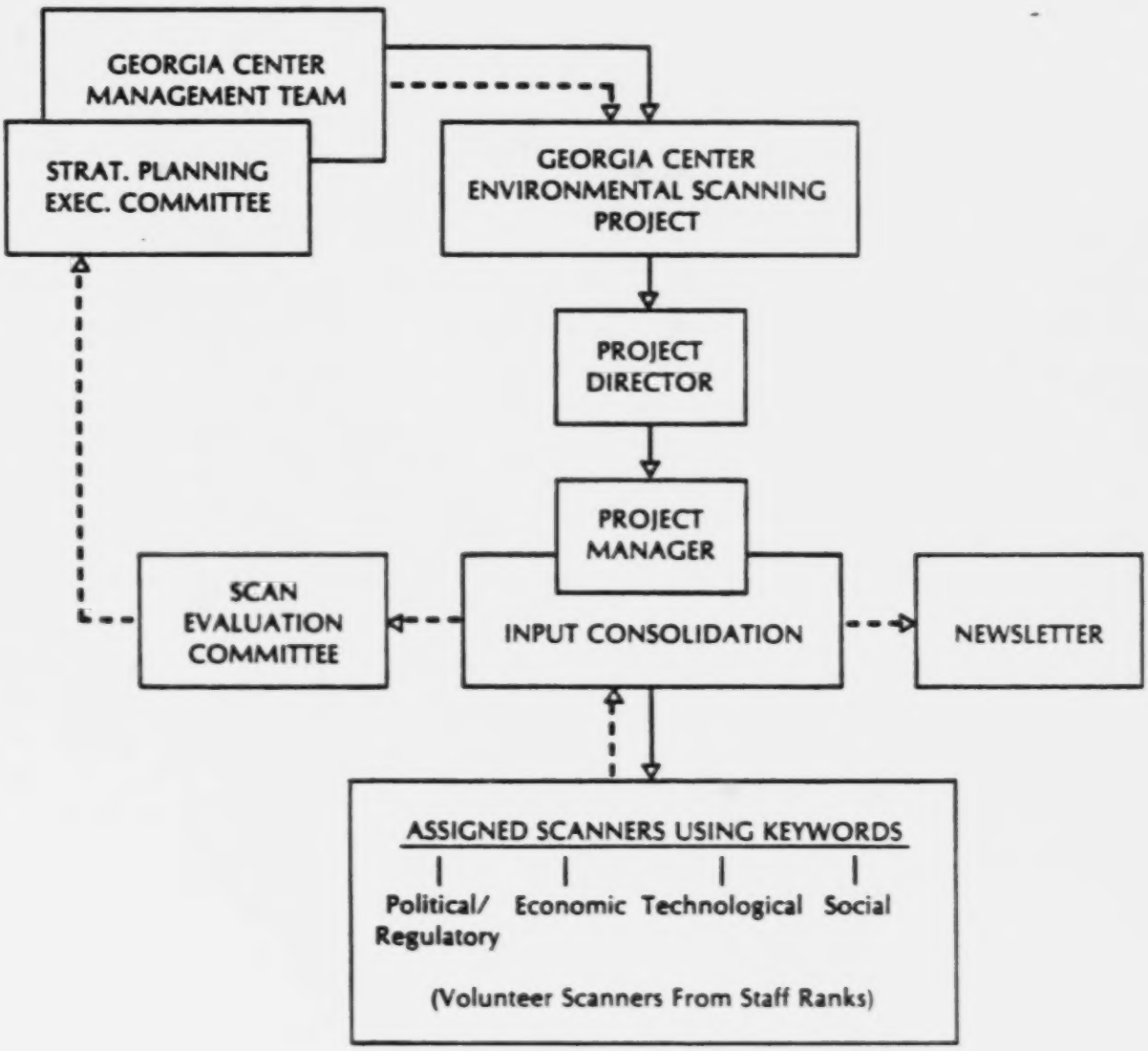
[1]When the project was initiated, all members of the evaluation committee reviewed and discussed the abstracts produced in that quarter during a half day meeting. The objective was to ascertain the environmental threats and opportunities to the Center suggested by the entire collection of abstracts and associated articles. However, the time set aside for this activity was insufficient for thoughtful analysis and discussion. Given the busy schedule of staff members, more time could not be allocated. Also, although all staff members were encouraged to browse in the files at their convenience throughout the quarter, few did so. Consequently, the project manager undertook the task of reviewing and categorizing the abstracts submitted each quarter.

[2]This is the only promulgation of programming ideas produced in the environmental scanning process. Programming is included on SPEC's discussion agenda only if there is a major allocation or reallocation of resources proposed.

FIG. 1

GEORGIA CENTER FOR CONTINUING EDUCATION
UNIVERSITY OF GEORGIA

ENVIRONMENTAL SCANNING PROJECT



Note:

Environmental scanning is organized as a project of the director's office and is a vital component of the Center's overall strategic planning model.

ENVIRONMENTAL SCANNING TAXONOMY

PROJECT-SCAN--GEORGIA CENTER FOR CONTINUING EDUCATION, UNIVERSITY OF GEORGIA

NOTES

1. The SCAN taxonomy serves to:

o indicate the parameters of active scanning of trends, issues, and events which are of major concern in strategic planning for the Georgia Center;
o organize the SCAN hardcopy files (abstracts and original references submitted by scanners);
o organize SCAN input for computer storage and retrieval by taxonomy codes and cross-reference codes.

2. The taxonomy is a dynamic scanning aid. It will change as necessary to better serve strategic planning. This first draft is modeled after the United Way taxonomy with numerous additions/deletions to better reflect the Georgia Center.

3. "Related Subjects" are not all-inclusive. Scanners should submit abstracts on any subject that has significant implications for the Georgia Center.

4. The taxonomy should guide active scanning of all continuing resources (print and media).

FILE	FILE NAME	RELATED SUBJECTS
F-FUTURE		
F-1	FORECAST SUMMARIES 1980s to 2000	FORECASTS OF CHANGES TO COME 1980s to 2000 (inc. social, economic, political, technological, "Information Age," "Learning Society," etc.) F11
F-2	FORECAST SUMMARIES 2000 and beyond	FORECASTS OF CHANGES TO COME (2000 and beyond) F21
F-3	FUTURES STUDY/RESEARCH	TECHNIQUES OF FUTURES STUDY (include environmental scanning, forecasting, issues management, strategic planning, Delphi, scenario dev., etc.) F31 HISTORY/PHILOSOPHY OF FUTURES STUDY F32 RELATIONSHIPS: PAST, PRESENT, AND FUTURE F33

FILE	FILE NAME	RELATED SUBJECTS
S-SOCIAL		
S-1	U.S. POPULATION SIZE/ COMPOSITION/MOBILITY	U.S. POPULATION GROWTH/SIZE (include projections) S11 AGING POPULATION/ELDERLY S12 BABY-BOOMERS S13 YOUNG ADULTS S14 AGE DISTRIBUTION S15 ETHNIC DISTRIBUTION S16 REGIONAL MIGRATION S17 IMMIGRATION TO U.S., esp. southeast S18
S-2	DEMOGRAPHIC OVERVIEWS	OVERVIEWS OF VITAL AND SOCIAL STATISTICS OF POPULATIONS and the effect on social and economic conditions.
S-3	VALUES AND ATTITUDES	NATIONAL "MOOD" (pos./neg., confidence in institutions, readiness for change, etc.) S31 ATTITUDES ON MAJOR ISSUES S32 AMERICAN VALUE SYSTEMS (include liberal, conservative, religious, humanistic, family, work, litigation, leisure, etc.) S33 GENERATIONAL VALUES S34 SOCIAL TRANSFORMATION S35 SOCIAL MOVEMENTS (include peace, environmental, women's, minorities, human rights) S36
S-4	LIFESTYLES	AGE GROUPS (include young adults, older adults, elderly) S41 SOCIOECONOMIC DIFFERENTIATIONS (include white collar, middle-income, professional, adult students, academic, etc.) S42 ALTERNATIVE LIFE STYLES (singles, families, working couples, single-parents, etc.) S43

FIG. 2

FILE	FILE NAME	RELATED SUBJECTS
S-5	U.S. EDUCATION	PUBLIC SUPPORT FOR EDUCATION, esp. public opinion polls (2)
S-5G	GA EDUCATION (Global Concerns)	EDUCATIONAL QUALITY (Include reports of various national studies) (3)
		LITERACY/ILLITERACY (4)
		xxxxxxx COMPUTER LITERACY/see T3
		xxxxxxx COMPUTERS IN EDUCATION/see T3
		ALTERNATIVE/EXPERIMENTAL TEACHING AND LEARNING MODELS (5)
S-6	EDUCATION, LIFELONG	LIFELONG LEARNING/EDUCATION, as a concept S61
		PRE-SCHOOL EDUCATION S62
		ELEMENTARY EDUCATION S63
		HIGH SCHOOL EDUCATION S64
		VOCATIONAL EDUCATION S65
		xxxxxxx HIGHER EDUCATION /see S-7
		xxxxxxx CONTINUING EDUCATION/see S-8
		ON-THE-JOB EDUCATION (Include corporate/business programs) S66
		PROFESSIONAL ASSOCIATIONS S67
		SELF-DIRECTED/SELF-PACED EDUCATION S68
		OTHER/ALTERNATIVE LIFELONG LEARNING OPTIONS S69
S-7	HIGHER EDUCATION, U.S.	GOVERNANCE (1)
S-G7	GA. HIGHER EDUCATION	LEGISLATIVE ISSUES (2)
S-UG7	UNIVERSITY OF GEORGIA	STATE MODELS (Include University System of Georgia) (3)
		STRATEGIC PLANNING (4)
		ALUMNI SUPPORT (5)
		PERSONNEL ISSUES (6)
		FINANCIAL ISSUES (7)
		ADMINISTRATIVE ISSUES (8)
		STUDENT ISSUES (9)
		TEACHING/CURRICULA ISSUES (10)
		RESEARCH ISSUES (11)
		xxxxxxxExclude Biotechnology/seeT-7
		PUBLIC SERVICE ISSUES (12)
		TECHNOLOGY ISSUES (13)
		OTHER ISSUES (Include athletics, church-state) (14)
		LAND GRANT CONCEPT (15)
		ENROLLMENT TRENDS (16)
		RELATIONSHIPS (Include private sector, other universities, Federal govt., states) (17)
		GRANTS/CONTRACTS (18)
		ALTERNATIVE FUTURES (19)

FILE	FILE NAME	RELATED SUBJECTS
S-8	HIGHER CONTINUING AND ADULT EDUCATION, U.S.	GOVERNANCE ISSUES (1)
S-8G	GA. HIGHER CONTINUING AND ADULT EDUCATION	LEGISLATIVE ISSUES (2)
		ALTERNATIVE MODELS (3)
		STRATEGIC PLANNING (4)
		PROFESSIONAL ISSUES (5)
		THEORETICAL ISSUES (6)
		PRACTICAL ISSUES (7)
		PERSONNEL ISSUES (8)
		FINANCIAL ISSUES (9)
		ADMINISTRATIVE ISSUES (10)
		STUDENT ISSUES (11)
		NON-CREDIT TEACHING/CURRICULA ISSUES (12)
		CREDIT TEACHING/CURRICULA ISSUES (13)
	Ga. Center/Kellogg Programs	PROGRAM DEVELOPMENT ISSUES (14)
		TECHNOLOGY ISSUES (15)
	Adult Counseling (141)	DELIVERY SYSTEMS (16)
	American Language Program/ English as a 2nd language (142)	RESIDENTIAL CONFERENCE CENTERS (17)
	Arts and Sciences (143)	RELATIONSHIPS (Include private sector, states, Federal govt., international concerns) (18)
	Business Education (144)	GRANTS/CONTRACTS FUNDING (19)
	Certificate Programs (145)	ALTERNATIVE FUTURES (20)
	Continuing Education for the Professions (146)	
	Disaster Preparedness (147)	
	Energy Education (148)	
	Evening Classes (149)	
	Forestry (150)	
	Gerontology (151)	
	Governmental Training (152)	
	Health (153)	
	Home Economics (154)	
	Independent Study (155)	
	Music (156)	
	Pharmaceutical Svcs. (157)	
	Recreation/Leisure (158)	
	Self-directed, self-paced learning (159)	
	Social Work Cont. Ed. (160)	
	Veterinary Medicine (161)	
S-9	PHILANTHROPY	LEVELS/PATTERNS OF GIVING IN HIGHER EDUCATION (Limit to corporations and private foundations) S91
		PRIVATE-PUBLIC COOPERATION S92
		BUSINESS VENTURES BY NON-PROFIT ORGANIZATIONS S93
		VOLUNTARISM S94
		ETHICS IN GRANTMAKING AND GRANTSEEKING, esp. as affect educational transactions S95

FIG. 3

PROJECT SCAN--GEORGIA CENTER FOR CONTINUING EDUCATION
1985-86

Continuing Resources Being Scanned by Volunteer Scanners

Adult and Continuing Education Today
Advertising Age
Alternative Higher Education
American Banker
American Educator
American Health
Athens Banner Herald
Athens Observer
Atlanta Constitution
Business Atlanta
Business Week
CAEL News
Change
Changing Times
Chronicle of Higher Education
Communications Age
Continuum
Discover
Education Review
Education USA
Educational Technology
Executive Woman
Forbes
Fortune
Foundation News
Futurist (The)
Georgia Business & Economic Conditions
Georgia Trend
Georontologist
"Green Sheet" (NASULGC)
Harper's
Harvard Business Review
Harvard Educational Review
Hotel Management
Journal of Continuing Education
Journal of Extension
Journal of Higher Education
Journal of Home Economics
Journal of Human Resources
Lifelong Learning Forum
Meeting News
Modern Maturity
Naisbitt Trend Report
National Review
New Republic
New York Review of Books
New York Times (Sun.)
New Yorker
New Woman
Newsweek
Office Administration/Automation
Office Professional
Omni
Practicuum
Psychology Today
Public Administration Review
Public Management
Public Opinion
Review of Higher Education
Savvy
Science News
Secretary (The)
Smithsonian
Social Forces
Society
Technology Review
Time
Training
Training & Development Journal
Urban Georgia
USA Today
U.S. News & World Report
Wall Street Journal
Wilson Quarterly

FIG. 4

ABSTRACT OF CONTINUING RESOURCE

Georgia Center Environmental Scanning Project--Director's Office

_____/TAXONOMY CODE (Primary) Cross Ref. Codes: _____

Scanner's Name Ernestine M. Copas

Nature of Resource: X Publication ___Conference/Meeting ___ Media

Title (Article, Session, Show): Part Time Teachers Turn to Unions to Alter Status as "Academic Stepchildren"

Author/Speaker/Reporter: Scott Heller

Publication/Conf./Network: The Chronicle of Higher Education

Date: Jan. 28, 1987 Pages: 1, 12 Vol.: XXXIII No.: 20

SUMMARY

Concise (single sp./typed statement which is understandable without reference to the original material)

On campuses around the country part-time and temporary instructors are pushing for power and many see unions as mostly likely the way to get results. At issue are salaries, benefits, terms of appointment, and measures to dispel their status as "academic stepchildren". In a landmark effort a union representing some 2,550 lecturers, adjunct professors, and temporary faculty members in the University of California system signed its first contact last year. The contract provides for a more regular system of hiring and reappointment. A recently ratified contract in the Massachusetts system boosted the minimum salary of part-timers from $1,800 to $2,800 per class. A college that pays a part-timer $1,500 to teach a class lowers every professor's worth, Mr. Bledsoe said. The union hopes to see that senior people are rehired first and promptly - decisions that are now left to the departments and campuses. It hopes to minimize situations in which sections are canceled a week into a semester because of low enrollments.

IMPLICATIONS

How might the Georgia Center's programs or management be affected?

The large number of part-time faculty that are used particularly in credit programs would indicate that we need to monitor this trend across the nation and develop some contingency plans to head off the need for unionization with our faculty.

Continue over as necessary

INSTRUCTIONS: Attach hard copy to abstract and return both to Donna McGinty, Director's Office, Room 119, Georgia Center

FIG. 5

STRATEGIC PLANNING WORKSHEET: Spring/Summer '86

Georgia Center for Continuing Education Scanning Project
University of Georgia

Strategic Thinking Stimulator	Abst.No.	File No.	Thumbnail Summary/Implications
SHOULD THE CENTER MOVE TO ADD A PERSONNEL OFFICER?	186	F31	Personnel departments (and roles) no longer use (EEO, OSHA, etc.) but also assertively, recogni use of people as well as materials. (NY Times) ning finds have pinpointed growing attention to development, career tracks, etc.
COULD OUR STRATEGIC PLANNING EFFORTS GO AWRY?	187 188	F31	Some say strat.planning on 5-year spans is too avoidance of top down planning w/ great leaps, growth avail. at lower level where entreprene (NY Times) (Payne) In this article, Emitai E- scanning has intuitive appeal to decision-mak as an approach to decision-making remains em sted. (Public Admin. Review) (Weeks)
IS HUMAN RESOURCE DEVELOPMENT (HRD) THE WAVE OF THE FUTURE, RATHER THAN TRADITIONAL CONT. ED.?	189 190 202 203	P21 P21 E41 E41	Congress is in favor of an integrated appro Training Incentives Act; Senate/Educational Act. Training targets include entry-level em women, welfare recipients, disadvantaged, and been consulted and rec. building "lifelong le Goal: greater workplace productivity w/ $ ince (Nat.Report on Human Resources) (Curtis) Servic will add 9 million jobs in next 10 years. Pool usually take these entry-level positions will shr 21% of labor force to 15%. Service industry compa in coping. (Fortune) (Brooks) Service industries Georgia's growth, from 373,000 workers in '82 to (Georgia Trend) (Shehane)
HOW FAR CAN WE PUSH FOR-PROFIT ACTIVITIES WITH THE GENERAL PUBLIC BEFORE GENERATING REPERCUSSIONS?	191	P21	Utah legislator introduced a bill to ban all st elementary & secondary schools, from providing private enterprise. Was upset that Utah Techni taken catering business from his family busine (Payne)

FIG. 6

COMPARISON OF SPEC & EVALUATION COMMITTEE STRATEGIC PLANNING CONCERNS
Georgia Center Environmental Scanning Project—Spring/Summer '86

STRATEGIC CONCERN	EVAL.COMMITTEE RANKING	SPEC RANKING
212/ORGANIZATIONAL & PERSONAL RENEWAL ARE ON-GOING COMPONENTS OF STRATEGIC PLANNING. What can and should be applied from what's happening in the outside world?	1	3/Tie
233/WHAT TECHNOLOGIES HOLD THE GREATEST POTENTIAL FOR ENHANCING THE DELIVERY OF INSTRUCTION IN THE NEAR TERM? What should we do to strengthen our position?	2	1
189/IS HUMAN RESOURCE DEVELOPMENT (HRD) THE WAVE OF THE FUTURE RATHER THAN TRADITIONAL CONTINUING EDUCATION?	3	No show
226/Last quarter's concern in still present: WHAT IF THE CONFERENCING COMPETITION WE RANDOMLY IDENTIFY IS BUT THE TIP OF AN ICEBERG?	Tie	2/Tie
228/SHOULD THE CENTER SEEK TO EXPAND ITS CLIENTELE BY PROGRAMMING FOR A POPULATION WHICH IT HAS NOT USUALLY TARGETED (AGE 55+)?	Tie	3/Tie
263/THREE YEARS AFTER "A NATION AT RISK" LAUNCHED A MASSIVE REFORM OF THE PUBLIC SCHOOL SYSTEM, THE GEORGIA CENTER REMAINS HAMSTRUNG IN RESPONDING TO TEACHER-ED NEEDS. What can be done & soon.	Tie	2/Tie
249/GIVEN UGA'S BIOTECH FOCUS, SHOULD CENTER MANAGEMENT BE TALKING LONG-TERM CONTINUING ED w/ BIOTECH VIPs?	No show	2/Tie

FIG. 7

LOOKOUTS

Vol. 1 No. 2 SPRING-SUMMER, 1986 Editor: Donna McGinty

CONTENT HIGHLIGHTS

- LOOKOUTS 1 1-3
  A BROAD SCAN OF THE EXTERNAL ENVIRONMENT
- LOOKOUTS 2 5-6
  STRATEGIC PLANNING CONCERNS
  SPRING/SUMMER, 1986
- LOOKOUTS 3 7-8
  PROGRAMMING SUGGESTIONS
  SPRING/SUMMER, 1986
- PROJECT-SCAN UPDATE..... 4

• Natural Resources... The dreadful drought of '86 is delivering a painful message to many Georgians: water supplies cannot be taken for granted. Consider Atlanta's future. Sometime around 2010, the seven-county Atlanta metropolitan area will boast a population of 3.6 million, creating a demand for more water than the Chattahoochee River or the Buford Dam reservoir can provide. (About 430 million gallons a day will be needed.) What can be done? A re-regulation dam is considered the preferred cure by planners and local government officials. It would be built 6.5 miles down the Chattahoochee from Lake Lanier and would catch water released from Buford Dam to generate power, providing an additional 53 million gallons per day for use of metro residents. Conservationists are witholding judgment pending the findings of a three-year study due out later this year.

• High Tech... Within the next ten years, could Georgia become the home of one of the world's most gigantic, complex, and intriguing projects in physics research? At the moment, it's not high on the agenda of the governor nor has it created much enthusiasm on the part of the chancellor of the University System of Georgia. However, a band of pipedreamers led by Paul Elbert, a physics professor at Middle Georgia College, is working hard to see that Georgia wins out in the fierce competition.

The prize is a superconducting supercollider (SSC), a gigantic particle accelerator designed for research into the origin of matter and energy. In the course of simulating conditions at the point of the creation of the universe, the origin of mass may be explained. All the action would happen 30 feet underground in a concrete tunnel about 60 miles in circumference. Inside the 12 foot diameter tunnel, proton beams traveling in opposite directions would collide at energies 20 times higher than ever before achieved. Cooling would be provided by 2,000 gallons of water per minute; electricity required daily would be 250 megawatts.

Professor Elbert believes Laurens and Dodge counties provide the optimum Georgia site for the $6 billion dollar project. Above ground, farming could continue. There would be clusters of SSC-associated buildings, resembling a small college campus. Up to 3,000 people would be employed.

The newsletter of the ENVIRONMENTAL SCANNING PROJECT of the
Georgia Center for Continuing Education, The University of Georgia, Athens, Georgia 30602

FIG. 8

EXAMPLES OF ISSUES SURFACED IN ENVIRONMENTAL SCANNING 1985-86
Georgia Center for Continuing Education

Note: All discussions in analysis committee meetings linked these issues directly to Georgia Center management concerns or program development.

Babyboomer values & aspirations

Aging of America

Videocassette recorders as a mass medium

Adult illiteracy

"Accountability" in higher education

Corporate America's interest in public schools

Corporate classroom

Human resource development

Growing tension between business and the non-profit sector

Litigation explosion

Inadequate child care nationwide

Direct mail (now leading advertising medium)

Unionization of non-profits

Concerns of academic administrators regarding continuing education

Employer preference for workers with associate degrees versus certificates or diplomas

Privitization (provision of public services by private sector)

Feminization of certain professions

Entrepreneurial philosophy of management

Value of conferences in disseminating research findings

Public service re-emerging as a national value

Need for foreign language training

International perspective (most adults lack)

Middle class (shrinking or expanding?)

Conferencing competition (upsurge in)

Electronic universities

Thinking & problem solving (missing links in schooling)

New technologies in program delivery

Marketing (customer demographics)

Self-directed learning

Fitness and health movement

Crisis management as a strategy

"Two Georgias" debate (one affluent, the other disadvantaged)

Desktop publishing

AIDS

Rural adult post-secondary education

Personal & organizational renewal

State governors & legislatures (key to meeting higher education goals)